Emerging Markets Debt Strategy

Quarterly Market and Strategy Review

For a discussion of the risks associated with this strategy, please see the Investment Considerations page at the end of the presentation.
Emerging Markets Debt Strategy

2022 Q2 Overview – Emerging Markets Debt Strategy

Markets
- Market sentiment remained skittish to broadly negative during 2Q22 as investors apprehension over escalating inflation, more aggressive central bank tightening schedules, and ongoing supply chain disruptions has turned to concern for a potential hard landing.
- China’s zero-covid policy continues to overhang the market outlook as lockdowns will dampen economic growth and accentuate supply-side disruptions.
- Expectation for continued U.S. Dollar strength against a backdrop of U.S. macroeconomic exceptionalism relative to G10 and broader EM.
- EM central banks globally have acted preemptively amidst high core inflation pressure, remaining committed to anchoring inflation expectations.
- Negative performance across EMD categories\(^1\): USD Sovereign -10.6%, USD Corporates -5.6%, and Local Currency Sovereign -8.6%.
- Despite record net outflows of ~$50Bn during 1H22, from a technical perspective the asset class is showing higher coupons and principal amortizations, as well as limited new issuance.

Portfolio
- Positioning in Brazil, Indonesia, and Mexico primarily through Corporate bonds highlights differentiated security selection process. Overall Corporate allocation at high end of historical range of the strategy.
- Portfolio duration is roughly 95% of benchmark level (portfolio 6.6 vs index 7.0).
- Tactical exposure to local currency bonds and FX remains limited at less than 5%.
- Purchased a handful of select new issues at attractive prices.
- Strategy underperformed its benchmark\(^2\) during the quarter (EMD Strategy -11.7% vs Index -10.6%) but remains well ahead YTD and over longer periods. No direct exposure to Russia a key contributor YTD.

As of June 30, 2022
2 Benchmark: JP Morgan EMBI Global Index

Performance shown is gross of fees in USD. Past performance is not indicative of future results.
2022 Performance challenging across EMD
Inflation, Russia/Ukraine, Stagflation, R-word?

Market volatility weighed on EMD\(^1\)
- All EMD categories negative 1H22 against a very challenging macro backdrop
- U.S. Dollar at record levels driving underperformance in EM
- UST10YR rates have moved from 1.5% to 3.0% on inflation concerns and expected Fed tightening cycle

Limited dispersion across HY vs IG, and Corporate vs Sovereign
- Sovereign HY significantly underperformed IG segment by ~600bps over 2Q. Corp HY trailed Corp IG by ~250bps

---

2 USD Sovereign: EMBI Global Investment Grade, EMBI Global High Yield
3 USD Corporate: CEMBI Broad Diversified Investment Grade, CEMBI Broad Diversified High Yield
Regional categories: USD Sovereign: EMBI Global Regional indices, USD Corporate: CEMBI Broad Diversified Regional indices
As of June 30, 2022
Source: JP Morgan, Bloomberg, Manulife Investment Management
Q2 Performance negative across EMD
Region and Rating categories

**Sovereign IG, Asia, MidEast less downside for Q2**

**USD Sovereign performance by Region**

- **Africa**: -18.7
- **Asia**: -6.7
- **Europe**: -38.0
- **Latin America**: -13.3
- **Middle East**: -7.5

**USD Corporate performance by Region**

- **Africa**: -6.8
- **Asia**: -9.6
- **Europe**: -5.0
- **Latin America**: -10.6
- **Middle East**: -4.3

**USD Sovereign performance by Rating**

- **AA**: -8.0
- **A**: -5.8
- **BBB**: -9.4
- **BB**: -11.9
- **B**: -16.8

**USD Corporate performance by Rating**

- **AA**: -3.9
- **A**: -9.9
- **BBB**: -3.2
- **BB**: -8.2
- **B**: -17.5

**Corporates outperformed Sovereigns**

**USD Sovereign performance by Region**

- **Africa**: -12.5
- **Asia**: -12.1
- **Europe**: -7.5
- **Latin America**: -22.0
- **Middle East**: -38.0

**USD Corporate performance by Region**

- **Africa**: -10.6
- **Asia**: -13.8
- **Europe**: -13.3
- **Latin America**: -16.8
- **Middle East**: -38.0

**USD Sovereign performance by Rating**

- **AA**: -13.8
- **A**: -11.6
- **BBB**: -9.4
- **BB**: -11.9
- **B**: -16.8

**USD Corporate performance by Rating**

- **AA**: -8.0
- **A**: -5.8
- **BBB**: -4.3
- **BB**: -7.5
- **B**: -11.3

4 Regional categories: USD Sovereign: EMBI Global Regional indices, USD Corporate: CEMBI Broad Diversified Regional indices

5 Rating categories: USD Sovereign: EMBI Global Rating category indices, USD Corporate: CEMBI Broad Diversified Rating category indices

As of June 30, 2022

Source: JP Morgan, Manulife Investment Management

Past performance is not indicative of future results.
Q2 Performance negative across major categories
EM Corporates and Local managed better against challenging backdrop

**Technical**
- ~$50 Billion record outflow from EMD asset class 1H22

**Relative Value**
- EM Sovereign and Corporates categories relative to US IG and US HY

**Challenging Q2 across categories**
- Corporate market segments showed less downside volatility

---


As of June 30, 2022
Source: JP Morgan, Manulife Investment Management
Past performance is not indicative of future results.
# Emerging Markets Debt Strategy

As of June 30, 2022

## Key investment risks

<table>
<thead>
<tr>
<th>Key investment risks</th>
<th>Market factors</th>
<th>Investment action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interest rate risk</strong></td>
<td>• Tightening of global monetary and fiscal policies by most DM and EM markets to counter inflationary pressures</td>
<td>Slightly short: 95% of index duration</td>
</tr>
<tr>
<td><strong>Country risk</strong></td>
<td>• Reduced projections for 2022 &amp; ‘23 reflect numerous medium-term macro challenges. • Recovery profiles vary greatly as linked to fiscal consolidation and inflation. • IMF Growth Projections (a/o July 2022)</td>
<td>Highest conviction: OW Brazil via corporates OW Mexico via corporates OW Indonesia via quasi-sov</td>
</tr>
<tr>
<td><strong>Credit risk</strong></td>
<td>• Bottom-up credit analysis provides further evidence of real economy and reinforces top-down sovereign view • Selective use of sectors and issuers inclusive of ESG considerations • Add diversification, lower volatility, and seek to exceed sovereign returns</td>
<td>Corporate allocation above historical average</td>
</tr>
<tr>
<td><strong>Currency risk</strong></td>
<td>• Market uncertainties and growth divergence drives strength of USD which determines any tactical allocation to Local debt</td>
<td>Tactical local position: Selective exposure</td>
</tr>
</tbody>
</table>

## Market factors

### IMF WEO

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>6.1</td>
<td>3.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Advanced</td>
<td>5.2</td>
<td>2.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Emerging</td>
<td>6.8</td>
<td>3.6</td>
<td>3.9</td>
</tr>
</tbody>
</table>

As of June 30, 2022
Emerging Markets Debt Strategy

- Increased relative duration to within ~0.4 years short of the index level.
- Selective country exposure that’s further diversified by investing across fixed income sub-sectors.

**Interest rate risk**
- Persistently high inflation across both DM and EM economies moved short term rates higher while US longer-term yields began to reflect growing concerns over a slowdown in global economic growth.
- Used interest rate futures to adjust portfolio duration marginally higher during the quarter.

**Country risk**
- Active allocation to 42 out of 70 countries in JP Morgan EMBI Global. O/W in LATAM and Africa and U/W in Europe, Middle East, and Asia.
- Added selectively to positions in Peru, S. Africa, and Brazil and exited local positions in China.

**Duration as of 2Q22**

**EMD Strategy Country Allocation (Top/Bottom 5)**

**Active Weight vs EMBI Global as of 2Q22**
Emerging Markets Debt Strategy

- Allocation to corporate credit increased during the quarter across a diverse group of issuers.
- Remain highly selective with local-market exposure and viewed recent U.S. dollar strength as an opportunity to tactically add local FX exposure in the portfolio.

**Credit risk**
- We added on the margin to our corporate allocation as we continue to look for opportunities to diversify away from pure sovereign and country risk in the portfolio.
- Higher oil & gas prices increased overall exposure to energy names, while we also added in TMT and consumer related names.

**Currency risk**
- With the US dollar hitting new highs during the quarter, we looked for opportunities to selectively increase local-currency exposure.
- During the quarter we exited our local positions in China, held exposure in S. Africa and Brazil, and used FX forwards to add exposure to CLP, MXN, and IDR.

**EMD Strategy Sector Allocation (%)**

**EMD Strategy Local Allocation (%)**

*As of end of period*
Emerging Markets Debt Strategy

- 2Q underperformance driven by UW China, UW Middle East, OW bias to HY segment

**Performance**

<table>
<thead>
<tr>
<th></th>
<th>2Q22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Markets Debt Composite – Gross</td>
<td>-11.74</td>
</tr>
<tr>
<td>JP Morgan EMBI Global Index</td>
<td>-10.55</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-1.21</td>
</tr>
</tbody>
</table>

**2Q22 performance attribution (bps)**

- **Country Allocation**
  - Detractors: -75
  - Contributors: 30

- **Security Selection**
  - Detractors: -55

- **Local Currency**
  - Detractors: -15

- **Yield Curve**
  - Detractors: -100
  - Contributors: 40

**2Q22 country allocation/security selection/local (bps)**

<table>
<thead>
<tr>
<th>Country</th>
<th>75</th>
<th>25</th>
<th>25</th>
<th>75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lebanon</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominican Rep</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qatar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UAE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Includes cash/other

As of June 30, 2022

Past performance is not indicative of future results. Performance is shown in USD, gross of fees and does not include advisory fees and other expenses an investor may incur, which when deducted will reduce returns. Changes in exchange rates may have an adverse effect.
Emerging Markets Debt Strategy

• YTD Outperformance driven by UW Russia, tactical Local allocations, shorter duration profile

<table>
<thead>
<tr>
<th>Performance</th>
<th>YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Markets Debt Composite – Gross</td>
<td>-17.59</td>
</tr>
<tr>
<td>JP Morgan EMBI Global Index</td>
<td>-18.83</td>
</tr>
<tr>
<td>Total</td>
<td>1.24</td>
</tr>
</tbody>
</table>

YTD performance attribution (bps)

- Country Allocation
- Security Selection
- Local Currency
- Yield Curve

YTD country allocation/security selection/local (bps)

Top/Bottom 10

*Includes cash/other
As of June 30, 2022
Inception date: March 1, 2007
Past performance is not indicative of future results. Performance is shown in USD, gross of fees and does not include advisory fees and other expenses an investor may incur, which when deducted will reduce returns. Changes in exchange rates may have an adverse effect.
Emerging Markets Debt Composite
Investment results as of June 30, 2022

### Annualized returns (%)

<table>
<thead>
<tr>
<th></th>
<th>3 Months</th>
<th>YTD</th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>7 Years</th>
<th>10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP Morgan CEMBI Broad Diversified Index</td>
<td>-18.71</td>
<td>19.25</td>
<td>-19.28</td>
<td>-3.73</td>
<td>-1.12</td>
<td>-1.00</td>
<td>-4.38</td>
</tr>
<tr>
<td>JP Morgan GBI-EM Global Diversified Index</td>
<td>-19.28</td>
<td>24.5</td>
<td>1.46</td>
<td>2.60</td>
<td>-0.50</td>
<td>-0.72</td>
<td>-1.49</td>
</tr>
</tbody>
</table>

### Calendar year returns (%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Markets Debt Composite (Gross)</td>
<td>-1.38</td>
<td>5.77</td>
<td>15.83</td>
<td>-5.16</td>
<td>14.35</td>
<td>14.90</td>
<td>-3.77</td>
<td>6.05</td>
<td>-6.42</td>
<td>20.56</td>
</tr>
<tr>
<td>JPMorgan EMBI Global Index</td>
<td>-1.51</td>
<td>5.88</td>
<td>14.42</td>
<td>-4.61</td>
<td>9.32</td>
<td>10.19</td>
<td>1.23</td>
<td>5.53</td>
<td>-6.58</td>
<td>18.54</td>
</tr>
<tr>
<td><strong>Excess return</strong></td>
<td>0.13</td>
<td>-0.11</td>
<td>1.41</td>
<td>-0.55</td>
<td>5.03</td>
<td>4.71</td>
<td>-5.00</td>
<td>0.52</td>
<td>0.16</td>
<td>2.02</td>
</tr>
<tr>
<td>JPMorgan CEMBI Broad Diversified Index</td>
<td>0.91</td>
<td>7.13</td>
<td>13.09</td>
<td>-1.65</td>
<td>7.96</td>
<td>9.65</td>
<td>1.30</td>
<td>4.96</td>
<td>-0.60</td>
<td>15.02</td>
</tr>
<tr>
<td><strong>Excess return</strong></td>
<td>-2.29</td>
<td>-1.36</td>
<td>2.74</td>
<td>-3.51</td>
<td>6.40</td>
<td>5.25</td>
<td>-5.07</td>
<td>1.09</td>
<td>-5.82</td>
<td>5.54</td>
</tr>
<tr>
<td>JPMorgan GBI-EM Global Diversified Index</td>
<td>-8.75</td>
<td>2.69</td>
<td>13.47</td>
<td>-6.21</td>
<td>15.21</td>
<td>9.94</td>
<td>-14.92</td>
<td>-5.72</td>
<td>-8.98</td>
<td>16.76</td>
</tr>
<tr>
<td><strong>Excess return</strong></td>
<td>7.37</td>
<td>3.08</td>
<td>2.36</td>
<td>1.05</td>
<td>-0.86</td>
<td>4.96</td>
<td>11.15</td>
<td>11.77</td>
<td>2.56</td>
<td>3.80</td>
</tr>
</tbody>
</table>

Composite inception date: March 2007

Returns greater than one year are annualized. Past performance is not indicative of future results. Performance is shown in USD, gross of fees and does not include advisory fees and other expenses an investor may incur, which when deducted will reduce returns. Changes in exchange rates may have an adverse effect.
Appendix
Consistent, competitive risk-adjusted performance
eVestment performance as of June 30, 2022

• Above median return rankings relative to all EMD strategies over longer periods

• Consistent volatility over various time periods

• Competitive risk-adjusted returns relative to benchmark and universe peers.

Source: Manulife Investment Management, eVestment. Peer and performance information provided for the eVestment All Emerging Markets Fixed Income Universe as of June 30, 2022
Past performance is not indicative of future results. Performance is shown in gross of fees.
eVestment rankings as of June 30, 2022
Consistent and competitive long-term performance

<table>
<thead>
<tr>
<th>Universe: eVestment All Emerging Mkts Fixed Income (Percentile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Year</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Rx</td>
</tr>
<tr>
<td>5th percentile</td>
</tr>
<tr>
<td>25th percentile</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>75th percentile</td>
</tr>
<tr>
<td>95th percentile</td>
</tr>
<tr>
<td># of Observations</td>
</tr>
</tbody>
</table>

Source: eVestment Alliance. Results displayed in U.S. Dollar (USD). Composite inception date: March 2007
Past performance is not indicative of future results. Performance is shown in gross of fees.
Emerging Markets Debt Strategy
Benchmark definitions

<table>
<thead>
<tr>
<th>Index</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP Morgan EMBI Global Index</td>
<td>The JP Morgan EMBI Global Index is a uniquely weighted index that tracks total returns for US dollar-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities, including Brady bonds, loans and Eurobonds.</td>
</tr>
<tr>
<td>JPMorgan GBI-EM Index</td>
<td>The JPMorgan GBI-EM is a comprehensive emerging markets debt benchmark that track local currency bonds issued by Emerging Market governments.</td>
</tr>
<tr>
<td>JPMorgan Corporate Emerging Markets Bond Index (CEMBI)</td>
<td>The JPMorgan Corporate Emerging Markets Bond Index (CEMBI) is a market capitalization weighted index consisting of liquid USD-denominated emerging market corporate bonds.</td>
</tr>
<tr>
<td>JPMorgan CEMBI Broad Index</td>
<td>The JPMorgan Corporate Emerging Markets Bond Index Broad (CEMBI Broad) is an expansion of the JPMorgan Corporate Emerging Markets Bond Index (CEMBI) that includes smaller issues to cover a wider array of corporate bonds.</td>
</tr>
<tr>
<td>JP Morgan EMBI Global Diversified Index</td>
<td>JP Morgan EMBI Global Diversified Index is a uniquely weighted index that tracks total returns for U.S. dollar-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities, including Brady bonds, loans and Eurobonds.</td>
</tr>
<tr>
<td>JP Morgan CEMBI Broad Diversified Index</td>
<td>The JP Morgan Corporate Emerging Markets Bond Index (CEMBI) is a market capitalization weighted index consisting of liquid USD-denominated emerging market corporate bonds.</td>
</tr>
<tr>
<td>JP Morgan EMBI Global Investment Grade Index</td>
<td>The JP Morgan EMBI Global Investment Grade Index is a sub-index of the JP Morgan EMBI Global Index, representing all investment grade securities in the main index.</td>
</tr>
<tr>
<td>JP Morgan EMBI Global High Yield Index</td>
<td>The JP Morgan EMBI Global High Yield Index is a sub-index of the JP Morgan EMBI Global Index, representing all high yield securities in the main index.</td>
</tr>
<tr>
<td>JPMorgan CEMBI Broad Diversified Investment Grade Index</td>
<td>The JPMorgan CEMBI Broad Diversified Investment Grade Index is a sub-index of the JPMorgan CEMBI Broad Diversified Index, representing all investment grade securities in the main index.</td>
</tr>
<tr>
<td>JPMorgan CEMBI Broad Diversified High Yield Index</td>
<td>The JPMorgan CEMBI Broad Diversified High Yield Index is a sub-index of the JPMorgan CEMBI Broad Diversified Index, representing all high yield securities in the main index.</td>
</tr>
</tbody>
</table>
## Schedule of Calendar Year Returns and Assets

<table>
<thead>
<tr>
<th>Year End</th>
<th>Gross of Fees Return (%)</th>
<th>Net of Fees Return (%)</th>
<th>Benchmark Return (%)</th>
<th>Composite 3-Yr Std. Dev. (%)</th>
<th>Benchmark 3-Yr Std. Dev. (%)</th>
<th>Number of Portfolios End of Period</th>
<th>Composite Dispersion (%)</th>
<th>Total Assets End of Period (Millions)</th>
<th>Firm Assets End of Period (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>-1.38</td>
<td>-1.97</td>
<td>-1.51</td>
<td>12.25</td>
<td>9.86</td>
<td>&lt;=5</td>
<td>N/A</td>
<td>1,186</td>
<td>423,801</td>
</tr>
<tr>
<td>2020</td>
<td>5.77</td>
<td>5.13</td>
<td>5.88</td>
<td>12.39</td>
<td>9.96</td>
<td>&lt;=5</td>
<td>N/A</td>
<td>1,128</td>
<td>421,097</td>
</tr>
<tr>
<td>2019</td>
<td>15.83</td>
<td>15.14</td>
<td>14.42</td>
<td>5.83</td>
<td>4.78</td>
<td>&lt;=5</td>
<td>N/A</td>
<td>1,120</td>
<td>422,034</td>
</tr>
<tr>
<td>2018</td>
<td>-5.16</td>
<td>-5.73</td>
<td>-4.61</td>
<td>6.85</td>
<td>5.63</td>
<td>&lt;=5</td>
<td>N/A</td>
<td>958</td>
<td>392,058</td>
</tr>
<tr>
<td>2017</td>
<td>14.35</td>
<td>13.67</td>
<td>9.32</td>
<td>7.31</td>
<td>5.38</td>
<td>&lt;=5</td>
<td>N/A</td>
<td>870</td>
<td>N/A</td>
</tr>
<tr>
<td>2016</td>
<td>14.90</td>
<td>14.21</td>
<td>10.19</td>
<td>8.24</td>
<td>6.33</td>
<td>&lt;=5</td>
<td>N/A</td>
<td>677</td>
<td>N/A</td>
</tr>
<tr>
<td>2015</td>
<td>-3.77</td>
<td>-4.35</td>
<td>1.23</td>
<td>7.94</td>
<td>6.98</td>
<td>&lt;=5</td>
<td>N/A</td>
<td>585</td>
<td>N/A</td>
</tr>
<tr>
<td>2014</td>
<td>6.05</td>
<td>5.41</td>
<td>5.53</td>
<td>8.07</td>
<td>7.60</td>
<td>&lt;=5</td>
<td>N/A</td>
<td>591</td>
<td>N/A</td>
</tr>
<tr>
<td>2013</td>
<td>-6.42</td>
<td>-6.98</td>
<td>-6.58</td>
<td>8.55</td>
<td>7.70</td>
<td>&lt;=5</td>
<td>N/A</td>
<td>212</td>
<td>N/A</td>
</tr>
<tr>
<td>2012</td>
<td>20.56</td>
<td>19.85</td>
<td>18.54</td>
<td>8.67</td>
<td>6.44</td>
<td>&lt;=5</td>
<td>N/A</td>
<td>277</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Firm Definition

For purposes of compliance with the Global Investment Performance Standards (GIPS®), our firm Manulife Investment Management “Manulife IM” was created on January 1, 2018 as a result of a consolidation of six firms that claimed compliance with GIPS®. Manulife IM comprises Manulife Investment Management (US) LLC, Manulife Investment Management (North America) Limited, Manulife Investment Management (Europe) Limited, Manulife Investment Management (Japan), Manulife Investment Management (Hong Kong) Limited, Manulife Investment Management (Singapore) Pte. Ltd., Manulife Investment Management Limited, Manulife Investment Management Private Markets (Canada) Corp. and John Hancock Trust Company. Effective January 1, 2021, the firm includes assets managed under contract by Manulife Investment Management Private Markets (US) LLC (“Manulife IM PM US”) and the unaffiliated managers SMA/Wrap business from John Hancock Investment Management LLC, a Manulife IM company.

### Compliance Statement

Manulife claims compliance with the Global investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Manulife has been independently verified for the periods 1/1/2018 through 12/31/2020. The verification report(s) are available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report. Compliance with the GIPS® Standards for the predecessor firms were verified by a third party for the periods noted: MAM US 1/1/1993 to 12/31/2017, MAM UK 1/1/2008 to 12/31/2017, MAM US 1/1/2006 to 12/31/2017, MAM HK 1/1/2006 to 12/31/2017, MAMS 6/5/2007 to 12/31/2017, and MAML 1/1/2007 to 12/31/2017. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

### General Disclosure

A complete list of the Firm's composite and pooled funds descriptions as well as policies regarding valuing investments, calculating performance, and preparing GIPS reports are available upon request. All returns reflect the reinvestment of dividends and other earnings. Gross performance results do not reflect the deduction of investment management fees, and are net of commissions and foreign withholding tax. Net performance results reflect the application of the highest incremental rate of the standard investment advisory fee schedule to gross performance results. Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size. Advisory fees are available upon request. Dispersion of annual returns is measured by an equal weighted standard deviation calculation of gross of fee returns. From inception to December 31, 2019 dispersion was measured by an asset weighted standard deviation calculation of gross of fee returns. Dispersion is not presented when there are five or fewer accounts in the composite for the entire year. Past performance is not a guarantee of future results. For annual periods starting January 1, 2011, the 3-year annualized ex-post standard deviation is not shown for the composite or the benchmark when 36 monthly composite returns are not available. The 3-year standard deviation for composite returns is calculated using composite gross returns.

### Composite Description

The Emerging Markets Debt strategy seeks to outperform its benchmark by investing primarily in fixed income securities issued by sovereign and quasi-sovereign entities as well as private corporations in emerging markets. The strategy may invest in both investment grade and non-investment grade (high yield) issues denominated in U.S. Dollars or local market (non-U.S.) currencies. The strategy consists of accounts managed at a prior firm until May 12, 2013. Performance results from the prior firm are linked to results achieved at Manulife Investment Management. From inception to December 31, 2014, none of the strategy assets were non fee-paying affiliated seed capital. As of December 31, 2015, 4.24% of strategy assets were non fee-paying affiliated seed capital, as of December 31, 2016, 4.08% of strategy assets were non fee-paying affiliated seed capital, as of December 31, 2017, 3.61% of strategy assets were non fee-paying affiliated seed capital, as of December 31, 2018, 3.019% of strategy assets were non fee-paying affiliated seed capital, as of December 31, 2019 the percentage of strategy assets that were non fee-paying affiliated seed capital was 3.03%, and as of December 31, 2020 the percentage of strategy assets that were non fee-paying affiliated seed capital was 3.16%.

### Fee Schedule

This report is intended for institutional investors and the standard investment advisory fee schedule is 0.60% on the first 25 million; 0.50% on the next 25 million; 0.40% thereafter.

### Benchmark Description

The JP Morgan EMBI Global Index is a uniquely weighted index that tracks total returns for U.S. dollar-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities, including Brady bonds, loans and Eurobonds.
Notice to Investors

BAHRAIN
The making available of this document is not intended to constitute, and should not be construed as amounting to, the conduct of a regulated investment service (as defined in volume 4 of the Rulebook issued by the Central Bank of Bahrain) within or from the Kingdom of Bahrain. All services described in this document are to be performed outside of Bahrain. This document has not been filed with or reviewed by the Central Bank of Bahrain, the Bahrain Bourse or the Ministry of Industry and Commerce of the Kingdom of Bahrain and accordingly those institutions take no responsibility for the accuracy of the statements and information contained in this document, nor shall they have any liability to any person for any loss or damage resulting from reliance on any statements or information contained herein.

KUWAIT
These confidential materials are not for general circulation to the public in Kuwait. Interests in any investment opportunities detailed are for information purposes only and have not been licensed for offering in Kuwait by the Capital Markets Authority, the Kuwait Central Bank or any other relevant Kuwaiti governmental agency. The offering of interests in any funds in Kuwait on the basis of a private placement or public offering is, therefore, restricted in accordance with Law No. 7 of 2010 and the bylaws thereto (as amended). No private or public offering of any investment opportunities detailed is being made in Kuwait, and no agreement relating to the entering into of any related agreement will be concluded in Kuwait. No marketing or solicitation or inducement activities are being used to offer or market interests in any funds in Kuwait.

OMAN
The information contained in this document neither constitutes a public offer of securities in the Sultanate of Oman as contemplated by the Commercial Companies Law of Oman (Sultani Decree 4/74) or the Capital Market Law of Oman (Sultani Decree 80/98), nor does it constitute an offer to sell, or the solicitation of any offer to buy Non-Omani securities in the Sultanate of Oman as contemplated by Article 139 of the Executive Regulations to the Capital Market Law (issued vide CMA Decision 1/2009). Additionally, this document is not intended to lead to the conclusion of any contract of whatsoever nature within the territory of the Sultanate of Oman. The Investor represents that he/she is a sophisticated investor (as described in Article 139 of the Executive Regulations of the Capital Market Law) and has such experience in business and financial matters that he/she is capable of evaluating the merits and risks of an investment in securities. The investor acknowledges that an investment in securities is speculative and involves a high degree of risk.

QATAR
This document is provided on an exclusive basis to the specifically intended recipient thereof, upon that person's request and initiative, and for the recipient's personal use only. Nothing in this document constitutes, is intended to constitute, shall be treated as constituting or shall be deemed to constitute, any offer or sale of securities in the State of Qatar or in the Qatar Financial Centre or the inward marketing of securities or an attempt to do business, as a bank, an investment company or otherwise in the State of Qatar or in the Qatar Financial Centre or other than in compliance with any laws applicable in the State of Qatar or in the Qatar Financial Centre governing the issue, offering and sale of securities. This document and the underlying instruments have not been approved, registered or licensed by the Qatar Central Bank, the Qatar Financial Centres Regulatory Authority, the Qatar Financial Markets Authority or any other regulator in the State of Qatar. Recourse against Manulife Investment Management and those involved with it, may be limited or difficult and may have to be pursued in a jurisdiction outside Qatar and the Qatar Financial Centre. This document and any related documents have not been reviewed or approved by the Qatar Financial Centre's Regulatory Authority or the Qatar Central Bank. Any distribution of this document by the recipient to third parties in Qatar or the Qatar Financial Centre beyond the terms hereof is not authorised and shall be the liability of such recipient.

THE KINGDOM OF SAUDI ARABIA (THE "KINGDOM")
This document is not for general circulation to the public in the Kingdom and may not be distributed except to such persons as would be permitted under the Offers of Securities Regulations issued by the Capital Market Authority. Interests in any investment opportunities detailed are for information purposes only and have not been licensed for offering in the Kingdom by the Capital Markets Authority or any other relevant agency and the Capital Market Authority does not make any representation as to the accuracy or completeness of this document, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. All persons receiving this document should conduct their own due diligence in the accuracy of the information relating to the investment opportunities detailed herein. No private or public offering of any investment opportunities detailed are being made in the Kingdom by virtue of this document, and no agreement relating to the entering into of any related agreement will be concluded in the Kingdom. No marketing or solicitation or inducement activities are being used to offer or market interests in any funds in the Kingdom. If you do not understand the contents of this document you should consult an authorised financial advisor.

UNITED ARAB EMIRATES
This presentation has not been approved or licensed by the UAE Central Bank, the UAE Securities and Commodities Authority (SCA), the Dubai Financial Services Authority (DFSA) or any other relevant licensing authorities in the UAE, and does not constitute a public offer of securities in the UAE in accordance with the commercial companies law, Federal Law No. 8 of 1984 (as amended), SCA Resolution No.(37) of 2012 (as amended) or otherwise.

This presentation is strictly private and confidential and is being issued to a limited number of institutional and individual investors who qualify as sophisticated investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose.
Investment Considerations

A widespread health crisis such as a global pandemic could cause substantial market volatility, exchange-trading suspensions and closures, and affect portfolio performance. For example, the novel coronavirus disease (COVID-19) has resulted in significant disruptions to global business activity. The impact of a health crisis and other epidemics and pandemics that may arise in the future, could affect the global economy in ways that cannot necessarily be foreseen at the present time. A health crisis may exacerbate other pre-existing political, social and economic risks. Any such impact could adversely affect the portfolio’s performance, resulting in losses to your investment.

Any performance information shown is the investment strategy composite gross of fees, including advisory and investment management fees and other expenses an investor would incur, but net of transaction costs, unless otherwise noted; deduction of such expenses would reduce returns. Net performance results reflect the application of the highest incremental rate of the standard investment advisory or management fee schedule to gross performance results, unless otherwise indicated. Changes in exchange rates may have an adverse effect. Actual fees may vary depending on, among other things, the applicable fee schedule, portfolio size and/or investment management agreement. For example, if $100,000 were invested and experienced a 10% annual return compounded monthly for 10 years, its ending value, without giving effect to the deduction of advisory or investment management fees, would be $270,704 with an annualized compounded return of 10.47%. If an advisory or investment management fee of 0.95% of the average market value of the account were deducted monthly for the 10-year period, the annualized compounded return would be 9.43% and the ending dollar value would be $246,355. Unless otherwise noted, returns greater than 1 year are annualized; calendar year returns for each one year period end in December. Discrepancies may occur due to rounding. Past performance does not guarantee future results.

Performance information shown is generally for discretionary strategies/solutions and managed by a Manulife entity which is GIPS compliant and falls under the definition of a corresponding Manulife GIPS firm. Some investment strategies/solutions may not be included in a GIPS compliant firm under certain circumstances, such as SMA/UMA business in Canada.

Any characteristics, guidelines, constraints, or other information provided for this material was selected by the firm as representative of the investment strategy and is provided for illustrative purpose only, may change at any time, and may differ for a specific account. Each client account is individually managed; actual holdings will vary for each client and there is no guarantee that a particular client’s account will have the same characteristics as described herein. Any information about the holdings, asset allocation, or sector diversification is historical and is not an indication of future performance or any future portfolio composition, which will vary. Portfolio holdings are representative of the strategy, are subject to change at any time, are not a recommendation to buy or sell a security, and do not represent all of the securities purchased, sold or recommended for the portfolio. It should not be assumed that an investment in these securities was or will be profitable. Top ten holdings information combines share listings from the same issuer, and related depositary receipts, into a singular holding to accurately present aggregate economic interest in the referenced company.

No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment. Diversification or asset allocation does not guarantee a profit or protect against the risk of a loss in any market. The indices referenced herein are broad-based securities market indices and used for illustrative purposes only. The indices cited are widely accepted benchmarks for investment performance within their relevant regions, sectors or asset classes, and represent non-managed investment portfolios. If derivatives are employed, note that investing in derivative instruments involves risks different from, or possibly greater than, the risks associated with investing directly in securities and other traditional investments and, in a down market, could become harder to value or sell at a fair price.

Information about SFDR

Unless otherwise noted, any references in this presentation to ESG or sustainability reflect the general approach of Manulife Investment Management to integrating sustainability risk considerations into our investment decision-making processes. Further details on Manulife Investment Management’s general approach to sustainability are available at www.manulifeim.com/institutional/global/en/sustainability.

The source for all information shown is Manulife Investment Management, unless otherwise noted.
Important Information

© 2022 Manulife Investment Management. All rights reserved. Manulife, Manulife Investment Management, Stylized M Design, and Manulife Investment Management & Stylized M Design are trademarks of The Manufacturers Life Insurance Company and are used by it, and by its affiliates under license.

This confidential document is for the exclusive use of the intended institutional investors or their agents and may not be transmitted, reproduced or used in whole or in part for any other purpose, nor may it be disclosed or made available, directly or indirectly, in whole or in part, to any other person without our prior written consent.

About Manulife Investment Management

Manulife Investment Management is the global wealth and asset management segment of Manulife Financial Corporation. We draw on more than a century of financial stewardship to partner with clients across our institutional, retail, and retirement businesses globally. Our specialist approach to money management includes the highly differentiated strategies of our fixed-income, specialized equity, multi-asset solutions, and private markets teams—along with access to specialized, unaffiliated asset managers from around the world through our multimanager model.

This material has not been reviewed by, is not registered with any securities or other regulatory authority, and may, where appropriate, be distributed by the following Manulife entities in their respective jurisdictions. Additional information about Manulife Investment Management may be found at manulifeim.com/institutional


No Manulife entity makes any representation that the contents of this presentation are appropriate for use in all locations, or that the transactions, securities, products, instruments or services discussed in this presentation are available or appropriate for sale or use in all jurisdictions or countries, or by all investors or counterparties. All recipients of this presentation are responsible for compliance with applicable laws and regulations.

This material is intended for the exclusive use of recipients in jurisdictions who are allowed to receive the material under their applicable law. The opinions expressed are those of the author(s) and are subject to change without notice. Our investment teams may hold different views and make different investment decisions. These opinions may not necessarily reflect the views of Manulife Investment Management or its affiliates. There can be no assurance that actual outcomes will match the assumptions or that actual returns will match any expected returns. The information and/or analysis contained in this material has been compiled or arrived at from sources believed to be reliable, but Manulife Investment Management does not make any representation as to their accuracy, correctness, usefulness or completeness and does not accept liability for any loss arising from the use of the information and/or analysis contained here. Neither Manulife Investment Management nor its affiliates provide legal or tax advice, and you are encouraged to consult your own lawyer, accountant, or other advisor before making any financial decision. Prospective investors should take appropriate professional advice before making any investment decision. In all cases where historical performance is presented, note that past performance does not guarantee future results and you should not rely on it as the basis for making an investment decision.

The information in this material may contain projections or other forward-looking statements regarding future events, targets, management discipline or other expectations, and is only current as of the date indicated. The information in this material including statements concerning financial market trends, are based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons. This material was prepared solely for informational purposes and does not constitute, and is not intended to constitute, a recommendation, professional advice, an offer, solicitation or an invitation by or on behalf of Manulife Investment Management or its affiliates to any person to buy or sell any security or to adopt any investment strategy, and shall not form the basis of, nor may it accompany nor form part of, any right or contract to buy or sell any security or to adopt any investment strategy. Nothing in this material constitutes investment, legal, accounting, tax or other advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. Neither Manulife Investment Management nor its affiliates provide legal or tax advice, and you are encouraged to consult your own lawyer, accountant, or other advisor before making any financial decision. Prospective investors should take appropriate professional advice before making any investment decision. In all cases where historical performance is presented, note that past performance does not guarantee future results and you should not rely on it as the basis for making an investment decision.
Important Information (continued)

The distribution of the information contained in this presentation may be restricted by law and persons who access it are required to comply with any such restrictions. The contents of this presentation are not intended for distribution to, or use by, any person or entity in any jurisdiction or country in which such distribution or use would be contrary to any applicable laws or regulations. By accepting this material you confirm that you are aware of the laws in your own jurisdiction relating to the provision and sale of the funds, portfolios or other investments discussed in this presentation and you warrant and represent that you will not pass on or use the information contained in this presentation in a manner that could constitute a breach of such laws by any Manulife entity or any other person.

Australia: Manulife Investment Management (Hong Kong) Limited (Manulife IM (HK)) is exempt from the requirement to hold an Australian financial services license under the Corporations Act in respect to the financial services being offered in this material. Manulife IM (HK) is regulated by the Securities and Futures Commission of Hong Kong (“SFC”) under Hong Kong laws, which differ from Australian laws. This presentation is directed at wholesale investors only.

China: No invitation to offer, or offer for, or sale of any security will be made to the public in China (which, for the purposes of this paragraph, does not include the Hong Kong or Macau Special Administrative Regions or Taiwan) or by any means that would be deemed public under the laws of China. The offering document of the subject fund(s) has not been submitted to or approved by the China Securities Regulatory Commission or other relevant governmental authorities in China. Securities may only be offered or sold to Chinese investors that are authorized to buy and sell securities denominated in foreign exchange. Prospective investors resident in China are responsible for obtaining all relevant approvals from the Chinese government authorities, including but not limited to the State Administration of Foreign Exchange, before investing.

Hong Kong: This material is provided to Professional Investors, as defined in the Hong Kong Securities and Futures Ordinance and the Securities and Futures (Professional Investor) Rules, in Hong Kong only. It is not intended for and should not be distributed to, or relied upon, by members of the public or retail investors.

Malaysia: This material was prepared solely for informational purposes and is not an offer or solicitation by anyone in any jurisdiction or to any person to whom it is unlawful to make such an offer or solicitation.

Singapore: This material is intended for Accredited Investors and Institutional Investors as defined in the Securities and Futures Act.

South Korea: This material is intended for Qualified Professional Investors under the Financial Investment Services and Capital Market Act (“FSCMA”). Manulife Investment Management does not make any representation with respect to the eligibility of any recipient of these materials to acquire any interest in any security under the laws of Korea, including, without limitation, the Foreign Exchange Transaction Act and Regulations thereunder. An interest may not be offered, sold or delivered directly or indirectly, or offered, sold or delivered to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea, except in compliance with the FSCMA and any other applicable laws and regulations. The term “resident of Korea” means any natural person having his place of domicile or residence in Korea, or any corporation or other entity organized under the laws of Korea or having its main office in Korea.

Switzerland: This material is intended for Professional Clients, including Institutional Clients, as defined in the Federal Financial Services Act (“FinSA”) and its implementing ordinance, at the exclusion of Professional Clients with an opting-out pursuant to Art. 5 (1) FinSA (“Opting-Out Clients”), and/or Qualified Investors pursuant to the Federal Collective Investment Schemes Act (“CISA”) and its implementing ordinances, at the exclusion of Opting-Out Clients and Managed/Advisory Retail Clients pursuant to Art. 10 (3er) CISA where relevant. The information provided in this material is for information purpose only and does not constitute an offer, a solicitation or a recommendation to contract a financial instrument or a financial service as defined under FinSA. This material does not constitute an implicit or explicit investment advice. The information provided herein is general in nature and does not constitute an advertisement of financial products in Switzerland pursuant to FinSA and its implementing ordinance.

European Economic Area and United Kingdom: The data and information presented is directed solely at persons who are Professional Investors in accordance with the Markets in Financial Instruments Directive (2004/39/EC) as transposed into the relevant jurisdiction. Further, the information and data presented does not constitute, and is not intended to constitute, "marketing" as defined in the Alternative Investment Fund Managers Directive.

United States: Manulife Investment Management (US) LLC (Manulife IM US) and Manulife Investment Management (North America) Limited (Manulife IM NA) are indirect wholly owned subsidiaries of Manulife. John Hancock Investment Management LLC and Manulife Investment Management (US) LLC are affiliated SEC-registered investment advisors using the brand name John Hancock Investment Management. This material is not intended to be, nor shall it be interpreted or construed as, a recommendation or providing advice, impartial or otherwise.